



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,074	10/30/2003	Riaz Merchant	64660(51919)	1373
21874	7590	09/08/2006	EXAMINER	
EDWARDS & ANGELL, LLP				MYINT, DENNIS Y
P.O. BOX 55874				ART UNIT
BOSTON, MA 02205				PAPER NUMBER
				2162

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/699,074	MERCHANT, RIAZ
	Examiner	Art Unit
	Dennis Myint	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 July 2006.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 3-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 3-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 October 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

1. This communication is responsive to Applicant's Amendment, filed on 28 July 2006.
2. Claims 1, 3-59 are pending in this application. Claims 1 and 46 are independent claims. In the Amendment filed on 28 July 2006, claims 1, 10, 28, 29, 30, 34, 46, 47, and 50 were amended. Claim 2 has been cancelled. This office action is made final.

### *Response to Arguments*

3. The applicant's arguments filed on 28 July 2006 have been fully considered but are moot in view of the new ground(s) of rejection.

Based on the amendments, Applicant argued that *the teaching at Page 4 of Sierakowski for Conversion Strategy tells the user in advance operational parameters and structure of the particular Btrieve application of interest. There is not discussion of identifying and determining the necessary structure information or creating ISAM database structure information file to be utilized at a later time for migration* (Applicant's Argument, Page 13-14). In response, new ground(s) of rejects are introduced to address the Applicant's said argument and subsequent arguments, referring to U.S. Patent Application Publication Number 2003/0074248 (Braud et al.).

Applicant argued that *"The wrapper.dll" utilizes the structure information only after they have been migrated suing the DTS wizard* (Applicant's argument, page-14); that however, *claim 29 is directed to the novel use of auxiliary databases by the claimed*

*system. The auxiliary file contains the ISAM database structure information* (Applicant's argument, Page-15); and that *claims 39 and 40, which depend on claim 1 indirectly define a database migration, which identifies the repository containing information about the ISAM database structure* (Applicant's argument, Page 15-16). Said arguments and other arguments Applicant made, as per claims 46-58, all relate to the ISAM database structure in formation and are all addressed by the new ground(s) of rejection which makes reference to Braud et al.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation " The intermediate database" (Claim 1 Line 15).

There is insufficient antecedent basis for this limitation in the claim.

Claims 3-47 are rejected under 35 U.S.C. 112, second paragraph because said claims depend on claim 1.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1, 3-24, and 26-43 and 46-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sierakowski et al. (hereinafter "Sierakowski") (*Migrating Btrieve Applications to MS SQL Server 7.0 in SQL Server 7.0 Resource Guide*, June 1999

<http://www.microsoft.com/technet/prodtechnol/sql/70/reskit/part11/sqc20.mspx?mfr=true> in view of Braud et al. (hereinafter "Braud") (U.S. Patent Application Publication Number 2003/0074248).

As per claim 1, Sierakowski is directed to a system (Page 1, Chapter 21, *Migrating Btrieve Applications to MS SQL Server 7.0*) for migrating an application developed around an ISAM database server to an SQL database server without source level changes (Page 5, Step 1: *Wrapper DLL* and *The goal of this stage in the conversion is to provide a layer of abstraction between the base application and Microsoft SQL Server. Using the concept of a wrapper DLL, the base application, Btrvapp.exe, can access SQL Server data without modification.*) and teaches the limitations:

- a) "a database migration tool" (Page 4, i.e., *Sample Application and Code Reference, Btrvapp.exe, Mybtrv32.dll, Odbcapp.exe, and Morepubs.sql*); and
- b) "a database driver" (Page 5, i.e., *a Pervasive Btrieve ODBC driver* and Page 4, i.e., *Mybtrv32.dll*);

"wherein said database migration tool migrates data from the ISAM database server to the SQL database server in such a manner that transparency between the application source and the database operation is maintained from a perspective of the application" (Page 5, i.e., Step 1: *Wrapper DLL* and *The goal of this stage in the conversion is to provide a layer of abstraction between the base application and Microsoft SQL Server. Using the concept of a wrapper DLL, the base application, Btrvapp.exe, can access SQL Server data without modification.*); and "wherein said

database driver intercepts functional calls" (Page 13, i.e., *For example, in the case of this conversion strategy, a wrapper DLL can intercept Btrieve calls made to an application and ...*) "specifying any database operation made to the ISAM database server from the application and translates them into corresponding SQL functional calls and statements" (Page 4, i.e., *Mybtrv32.dll*" and *Sample wrapper DLL that translates the Btrieve calls in Btrvapp.exe to ODBC and Transact-SQL calls.*) "in such a manner that allows complete transparency between the SQL database server and the application so as to allow the application to continue to perform as it normally does and continue to receive and send data to the SQL database server in a format it expects with the ISAM database server" (Page 5, i.e., *Step 1: Wrapper DLL and Using the concept of a wrapper DLL, the base application, Btrvapp.exe, can access SQL Server data without modification.*).

Sierakowski does not explicitly teach the limitations: "by identifying at least one repository containing information regarding an ISAM database associated with the application, creating ISAM database structure information about the ISAM database, creating an auxiliary file, and storing the ISAM database structure information in the auxiliary" ; "utilizing the ISAM database structure information"; and "utilized the intermediate database".

Braud teaches the limitations:

"by identifying at least one repository containing information regarding an ISAM database associated with the application, creating ISAM database structure information about the ISAM database, creating an auxiliary file, and storing the ISAM database

structure information in the auxiliary file"(Paragraph 0139, i.e., *the information stored within each of the disparate system databases is structured based on vendor-defined database rules rather than enterprise rules. Therefore, in order for enterprise server 530 to communicate with and request data from any of the ancillary systems, a group of vendor database access rules must be followed. These rules are also stored in enterprise database 532.*; Paragraph 0041, i.e., *the vendor specific rules and/or implementation strategies chosen by the vendor; Paragraph 0041, i.e., If it is necessary for the enterprise application system to know the state of the data at admit, then some process must retain that state; Paragraph 0041, i.e., Another example would where the vendor chooses a proprietary or secret data storage technique instead of an industrial standard method; and Paragraph 0041, i.e., the data would be inaccessible without knowledge of the secret routines or vendor-specific decryption keys. )*;

"utilizing the ISAM database structure information" (Paragraph 0139-0140); and "utilized the intermediate database" (Paragraph 0139-0140). Braud is directed to accessing and assimilating data stored in disparate, ancillary systems (Paragraph 0002).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the feature of maintaining database-specific information, such as database structure information, access information, storage information, and encryption information, in order to access/assimilate disparate database systems, as taught by Braud, with the system of Sierakowski so that the combined system would identify at least one repository containing information regarding

an ISAM database associated with the application, create ISAM database structure information about the ISAM database, create an auxiliary file, store the ISAM database structure information in the auxiliary and utilize the ISAM database structure information. One would have been motivated to do so in order to *convert the vendor information to an enterprise usable form and then store the enterprise information on an enterprise database* (Sierakowski, Paragraph 0016).

As per claim 3, Sierakowski teaches the limitation:

“wherein said database driver uses a native low level API to communicate with the SQL database server” (Page 5, i.e., *Conversion Strategy and a full ODBC* and Page 11, i.e., *Figure: DTS Import Wizard and Destination: Microsoft SQL Server 7.0 Only [OLE DB Provider]*).

As per claim 4, Sierakowski teaches the limitation:

“wherein said database driver provides a direct connection to the SQL database server” (Page 5, i.e., *Conversion Strategy and a full ODBC* and Page 8, i.e., *Figure: DTS Import Wizard* and “*Destination: Microsoft SQL Server 7.0 Only [OLE DB Provider]*”).

As per claim 5, Sierakowski teaches the limitation:

“wherein said database migration tool sets up the SQL database server” (Page 8, i.e. *DTS Import Wizard*).

As per claim 6, Sierakowski teaches the limitation:

“wherein said database migration tool copies data at high speeds using native tools for fast data loading” (Page 5, i.e., *First, you create a data source name (DSN) by using an ODBC driver or an OLE DB provider.*).

As per claim 7, Sierakowski teaches the limitation:

“wherein said database migration tool copies data at high speeds using native high speed data loading mechanisms and application programming interfaces” (Page 6, i.e., *In the System DSN dialog box, click Add, and then configure the Btrieve data source, Make sure that the data source points to your database.*” and *Figure: “Pervasive Software ODBC Interface for Windows*).

As per claim 8, Sierakowski teaches the limitation:

“wherein said database migration tool generates SQL scripts to create tables and indexes”. (Page 1, i.e., *Job Scheduling and Execution and Great flexibility is provided through a variety of scripting environments: Microsoft Visual Basic Scripting Edition, Java scripting, Microsoft Windows NT commands and custom ODBC and OLE DB programs.* and Page 13-14, i.e., *Creating the Wrapper DLL*” and “*Determining Which Functions to Wrap*”). Generating SQL scripts to create tables and indexes are inherent in the migration feature of Microsoft SQL Server 7.0.

As per claim 9, Sierakowski teaches the limitation:

"wherein said database migration tool is a GUI application that sets up a necessary environment and files that are later used by said database driver" (Page 7-9, i.e. *Figure: DTS Wizard, DTS Import Wizard, and Column Mappings and Transformation*).

As per claim 10, Sierakowski in view of Braud teaches the limitations:

"wherein the ISAM database structure information comprises data files and at least one of table definitions and index information" (Braud, Paragraph 0139-0140; Sierakowski, *Page 7, Figure: DTS Wizard and Data Transformation Services Wizard: The Data Transformation Services makes it easy to import, export, validate and transform heterogeneous data using OLE DB and ODBC. This Wizard helps you perform the steps to import or export data between many popular data formats including databases, spreadsheets, and text files.*). As such, notethat, inherently, Microsoft SQL Server 7.0 translates all and any database and security information from the ISAM database (Btrieve) to the SQL database server.

As per claim 11, Sierakowski in view of Braud teaches the limitations:

"Wherein said database migration tool reads table and index definitions" (Braud Paragraph 0139-0140; Sierakowski, *Page 9, Figure: DTS Import Wizard and "Select Source Table"*);

"wherein said database migration tool performs data type translation by mapping data types from the ISAM database server to the SQL database server" (It is inherent

that Migration Wizard of Microsoft SQL Server 7.0 maps data types from those of the ISAM database to those of SQL Server. Microsoft SQL Server 7.0 employs *Pervasive Btrieve ODBC driver*, Sierakowski et al, Page 5);

“wherein said database migration tool reads security information on files to be translated” (Sierakowski, Page 2, i.e., *Security: Security administration is improved and simplified through better integration with Windows NT security and SQL Server roles. Windows NT integration includes authentication, support for multiple groups, grant/revoke/deny permission management activities and dynamic use of groups.*);

“wherein said database migration tool generates migration reports and function call traces” (Sierakowski, Page 4, i.e., *Sample Application and Code reference and Btrvapp.exe: ..... It is the starting point for the conversion strategy, and it is a simple data-entry and reporting application.. Also note that it is well known in the art that migration/upgrade/update reports are generated any commercial database servers.*);

“wherein said database migration tool allows users to browse data before and after translation” (Sierakowski, Page 9-10, *Figure: DTS Import Wizard, Column Mapping and Transformations and Select Your Tables*);

“wherein said database migration tool allows switching between the ISAM and the SQL database servers by just adding or removing driver name prefixes” (Sierakowski , Page 7, i.e. *Figure: DTS Import Wizard, Choose a Data Source and Page 8, Figure: DTS Import Wizard and Choose A Destination. Note that by changing source and destination, respective database drivers are also changed and vice versa.*);

“wherein said database migration tool generates scripts for fast loading of data into native types by generating text files and scripts that can be used by the SQL database server for high-speed database migration” (Sierakowski, Page 1, i.e., *Job Scheduling and Execution* and *Great flexibility is provided though a variety of scripting environments: Microsoft Visual Basic Scripting Edition, Java scripting, Microsoft Windows NT commands and custom ODBC and OLE DB programs.* and Page 13-14, i.e., *Creating the Wrapper DLL and Determining Which Functions to Wrap*);

“wherein said database migration tool allows migrated tables to be removed or dropped from the SQL database server” (Official note is taken that the concept of removing dropping tables during database is notoriously well known in the art.);

“wherein said database migration tool allows data to be read back into a table of the ISAM database server from a corresponding migrated table of the SQL database server” (It is inherent in Microsoft SQL Server 7.0 that translation/transformation can be done in either direction.); and

“wherein said database migration tool generates auxiliary files with appropriate table information so as to allow said database driver to function properly in its task as functional translator” (Use of auxiliary or temporary files are inherent in migration tools.).

As per claim 12, Sierakowski teaches the limitation:

“wherein a type of functional translation said database driver performs is dependent on the ISAM database server and the SQL database server between which

said database driver acts as a middle-ware or bridge" (Page 5, i.e., a *Pervasive Btrieve ODBC driver* and said Pervasive Btrieve ODBC driver is a middleware.).

As per claim 13, official note is taken that the concept of finding, fetching records using indexes has been notoriously well known in the art since the inception of databases and database servers. See Page 16 of Sierakowski et al, i.e. *Understanding ODBC and SQL Implementation and Cursors and Btrieve files are accessed similarly, for example, through the use of FETCH, GET FIRST, and NEXT operations*. Also see Page 27 of Sierakowski , especially on the part on *Recommendations for Creating Indexes and Database Index Guidelines*.

Similarly, referring claims 14, Official note is taken that finding an existing record, applying changes to records, updating records and saving records is notoriously well known in the art.

As per claim 15, Official Note is taken that finding a record and deleting the record is notoriously well known in the art.

As per claim 16, Official Note is taken that saving a newly created into a table is notoriously well known in the art.

As per claim 17, Sierakowski teaches the limitation:

"wherein said database driver has an ability to start a transaction on the SQL database server and provide a same transactional functionality of the ISAM database server" (Page 17, i.e., *Alternatively, the wrapper DLL could retrieve data from SQL Server into buffers maintained on the client or another computer. The application then fetches data from the buffers instead of from SQL Server directly by using ISAM-like processing techniques.*).

As per claim 18, Sierakowski teaches the limitation:

"wherein said database driver" (Page 5, i.e., a *Pervasive Btrieve ODBC drive*) "has an ability to send a transaction instruction to the SQL database server and make the transaction permanent by committing to disk" (Page 4, i.e., *Mybtrv32.dll* and *Sample wrapper DLL that translates the Btrieve calls in Btrvapp.exe to ODBC and Transact-SQL calls*). Note that Transact-SQL calls could commit transactions to disk.

As per claim 19, Sierakowski teaches the limitation:

"wherein said database driver has an ability to issue an abort transaction command in an event of an error during a begin/end transaction block so as to allow the transaction to be rolled back restoring record buffers and tables to their original states" (Page 17, i.e., *Handling Error* and *The wrapper DLL must use Btrieve return codes when exiting each function. Each wrapper function must return B\_NO\_ERROR or a Btrieve error code corresponding to the type of error that was encountered. By using a valid Btrieve return code, the base application code does not know that its library*

*function is accessing SQL Server instead of Btrieve. You must return the Btrieve return codes that are expected by the base application in order for the wrapper DLL to work properly.). The feature of rolling back a transaction if said transaction is not successful are well known in the art.*

As per claim 20, Sierakowski teaches the limitation:

*"wherein said database driver allows structure of an existing index to be modified by the application" (Page 27, i.e., *Users of Microsoft SQL Server 7.0 can benefit from the new graphical SQL Query Analyzer and Index Tuning Wizard*.).*

As per claim 21, Sierakowski teaches the limitation:

*"wherein said database driver allows functionality to add a new field to an existing table that is supported by the SQL database server" (Page 27; Claim 21 is rejected on the same basis claim 20. Note Page 27 of Sierakowski et al, i.e. *Indexes to improve performance: You can optionally create unique or non-unique indexes on tables, and Clustered Indexes*. As such, it is inherent that indexes can be created or deleted or dropped.*

As per claim 22, Sierakowski teaches the limitation:

*"wherein said database driver supports creation of a new index on a table" (Page 27; Claim 22 is rejected on the same basis claim 20. Note Page 27 of Sierakowski et al, i.e. *Indexes to improve performance: You can optionally create unique or non-unique**

*indexes on tables, and Clustered Indexes.* As such, it is inherent that indexes can be created or deleted or dropped.

As per claim 23, Sierakowski teaches the limitation:

"wherein said database driver supports deletion of a field from an existing table"

(Page 27; Claim 23 is rejected on the same basis claim 20. Note Page 27 of Sierakowski et al, i.e. *Indexes to improve performance: You can optionally create unique or non-unique indexes on tables, and Clustered Indexes.* As such, it is inherent that indexes can be created or deleted or dropped.

As per claim 24, Sierakowski teaches the limitation:

"wherein said database driver allows dropping an existing index from table"

(Page 27; Claim 24 is rejected on the same basis claim 20. Note Page 27 of Sierakowski et al, i.e. *Indexes to improve performance: You can optionally create unique or non-unique indexes on tables, and Clustered Indexes.* As such, it is inherent that indexes can be created or deleted or dropped.

As per claim 26, Sierakowski teaches the limitation:

"wherein said database driver provides support for case insensitive indexes available in most ISAM databases but likely absent in some SQL databases; and wherein said database driver provides support for an index that contains ascending and descending index segments in order to avoid costly ORDER BY clauses in an SQL

statement." (Page 27, i.e., *Recommendations for Creating Indexes*) Note that Microsoft SQL Server 7.0 is case insensitive. In addition, Sierakowski discloses index segments (*Clustered Index*) stating *Clustered Indexes physically order the table data on the indexed columns.* (Sierakowski, Page 27, i.e., *Recommendations for Creating Indexes*).

As per claim 27, Sierakowski teaches the limitation:

"wherein said database driver provides a mechanism to switch between record-at-a-time access provided by the ISAM database server and set-based access provided by the SQL database server so as to perform order entry or order update by using the record-at-a-time access while for reports or batch processes by using set-based access." (Page 27 and Page 14) Note that the migration/conversion system, which is integrated with Microsoft SQL Server 7.0, provides for implementing the Btrieve functions from within the wrapper (Page 14, i.e., *Implementing the Btrieve Functions Within the Wrapper*). As such, it is inherent that Microsoft SQL Server 7.0 could inherently emulate any Btrieve functions, including the record-at-a-time access. Therefore, Microsoft SQL Server 7.0 could provide both record-at-time access and set-based access ("Clustered Indexes", Page 27). Also see Page 16 of Sierakowski.

As per claim 28, Sierakowski teaches the limitations:

"wherein said database driver provides support for all authentication methods for the SQL database server "

"wherein said database driver automatically pops a login dialog box if a file is opened without being logged onto the SQL database server;  
wherein said database driver provides support for a login command that can be added to an application either compiled in or externally to support security services;  
wherein the login command creates a connection handle which uniquely identifies a user connection; wherein the connection handle is kept in memory in a data structure during execution of the application; and  
wherein a logout command destroys the memory in the data structure and releases the connection handle." (Sierakowski et al, Page 2, i.e. *Security: Security administration is improved and simplified through better integration with Windows NT security and SQL Server roles. Windows NT integration includes authentication, support for multiple groups, grant/revoke/deny permission management activities and dynamic use of groups.*) It is inherent that in Microsoft SQL Server 7.0 security features such as login commands, logout command, and their related functions are provided.

As per claim 29, Sierakowski in view of Braud teaches the limitations  
"wherein a file open command opens the auxiliary file to create a memory structure about both ISAM and SQL tables;  
wherein the auxiliary file contains the ISAM database structure information that is not supported by the SQL database server but is needed by the application;  
wherein the auxiliary file is stored both as a binary and as a text file; and

wherein said database driver supports a close function by destroying all memory structure created by the file open command and closes a table handle for a table" (Braud Paragraph 0139-0140; and Sierakowski, Page 15, i.e. *Addressing the Btrieve posBlock Handle*). Braud teaches maintaining database-specific information, such as database structure information, access information, storage information, and encryption information, in order to access/assimilate disparate database systems. Sierakowski discloses that *In the Btrieve environment, posBlock is a unique area of memory that is associated with each open file and that contains logical positional information to access records. The Btrieve libraries initialize and use this memory area to perform data functions. The Btrieve application inserts into every Btrieve call a pointer to the posBlock. The wrapper DLL does not need to maintain any Btrieve-specific data within the posBlock, so it is free to use this memory area for other operations. In the example DLL wrapper, the memory area is used to store the unique identifier for the SQL Server data affected by the requested operation. Regardless of the contents of the posBlock maintained by the wrapper DLL, each memory block must be unique to each corresponding SQL Server table set. For example, Btrvapp.exe references two Btrieve files, Sales.btr and Titlepub.btr, where Sales.btr contains sales information for each title and Titlepub.btr maintains the title and publisher for each title. These files correspond to the bsales and titlepublishers tables that were created in the pubs database by the sample script, Morepubs.sql. In Btrvapp.exe, the B\_OPEN operation opens the requested Btrieve file and creates its corresponding posBlock. In the wrapper, the same posBlock now references a particular table by name. The wrapper DLL can be designed*

*to store any form of a unique identifier that represents the SQL Server data that it accesses. Table names are used in the context of this migration strategy for ease of presentation. The keybuffer parameter contains the file name of the Btrieve file to be opened when B\_OPEN is called. The wrapper DLL implementation of the B\_OPEN function sets the posBlock equal to this file or table name.*

As per claim 30, Sierakowski teaches the limitation:

*"wherein said database migration tool performs a convert database operation by creating a corresponding table in the SQL database server so as to form a newly created table and copying data of the ISAM database server to the newly created table"* (Page 4, i.e., *Conversion Strategy*, Page 5, i.e., *Figure: Conversion Strategy: Application Architecture Stages*, and Page 9, i.e., *Figure: Column Mappings and Transformation, Create Destination Table*, and *Optionally, modify the CREATE TABLE statement that was automatically generated.*).

As per claim 31, Sierakowski teaches the limitation:

*"wherein said database migration tool during said convert database operation brings up a dialog box to allow the user to set migration options so as to form selections"* (Page 9 *Figure: DTS Import Wizard* and *"Select Your Tables.*).

As per claim 32, Sierakowski teaches the limitation:

"wherein said selections are stored in auxiliary files called .INT (intermediate) file and .TD (table definition) file". Such auxiliary/intermediate files and table definition files are inherent in any database servers including Microsoft SQL Server 7.0.

As per claim 33, Sierakowski teaches the limitation:

"wherein said database driver supports setting and fetching table and database attributes when requested by the application" (Page 9 Figure: *Column Mapping and Transformations* and Page 10, i.e., *You can use this functionality to help you check for potential year 2000 problems, and to change data to reflect standard coding such as country codes, state names, or phone number formatting.*).

As per claim 34, official note is taken that the concept of using database attributes/table attributes such as number of records in a table, maximum allowable records, and file modes are notoriously well known in the art.

As per claim 35, Sierakowski teaches the limitation:

"wherein a table attribute is changing field names or field types" (Page 10, i.e., *You can use this functionality to help you check for potential year 2000 problems, and to change data to reflect standard coding such as country codes, state names, or phone number formatting.*).

Claims 36 and 37 are rejected on the same basis as 27.

Since the migration/conversion feature of Microsoft Server 7.0 integrates both functions of Btrieve and SQL Server, database driver of the said feature provides a mechanism to support additional commands specific to said database driver that result in increased performance, such as commands which fetch a complete record (such as by Btrieve) or need columns (such as by a SQL Server).

As per claim 38, Sierakowski teaches the limitation:

"wherein said database migration tool identifies any repository" (Page 9 *Figure: Select Your Source Tables*) "containing information regarding an ISAM database structure to migrate; wherein said database migration tool allows a user to choose which data files of the ISAM database server will be migrated; and wherein said database migration tool initiates migration" (Page 10 *Figure: Column Mapping and Transformation*. Particularly note the Visual Basic Transformation Script in the window of the figure).

As per claim 39, Sierakowski teaches the limitation:

"wherein the repository containing information regarding an ISAM database structure includes data dictionaries, file definitions, or file lists" (Page 8, i.e., *Figure Specify Table Copy or Query*). Note that in the Btrieve source tables, ISAM database structures such as data dictionaries, file definitions, or file lists are inherent.

Claim 40 is rejected on the same basis as claim 39.

As per claim 41, Sierakowski teaches the limitation:  
“wherein said database migration tool allows a user to locate and select a repository containing information regarding an ISAM database structure” (Page 9, i.e., *Figure: Select Your Source Tables*) and “display file entries in a file list dialog box by virtue of said database migration tool working with the repository containing information regarding an ISAM database structure” (Page 10, i.e., *Figure: Select Your Source Tables*).

Claim 42 and 43 are rejected on the same basis as claim 39 and 40 respectively.

Claims 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, and 58 are rejected on the same basis as Claims 1, 9, 40, 39, 31, 31, 30, 8, 1, 31, 6, 7, and 32 respectively.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sierakowski in view of Braud and further in view of Pervasive SQL 2000 (Pervasive SQL 2000 v7.82, Service Pack 2a Patch Update <http://www.pervasive.com/support/updates/Readsp2Server.htm>, August 2000).

As per claim 25, Sierakowski does not explicitly teach the limitation:  
“wherein said database driver provides a mechanism to implement auto-increment fields that are available in many ISAM databases as well as SQL databases in such a way that the application sees no difference between the ISAM database

server and the SQL database server even though the SQL database server handling is different."

Pervasive SQL 2000 teaches the limitation:

"wherein said database driver provides a mechanism to implement auto-increment fields that are available in many ISAM databases as well as SQL databases in such a way that the application sees no difference between the ISAM database server and the SQL database server even though the SQL database server handling is different" (<http://www.pervasive.com/support/updates/Readsp2Server.htm>, August 2000).

Pervasive SQL 2000 v7.82, Service Pack 2a Patch Update

(<http://www.pervasive.com/support/updates/Readsp2Server.htm>, August 2000) states that *AUTO-INCREMENT (Identity)* and *Change in behavior for implementing AUTO-INCREMENT (Identity)* and *Old behavior: To implement the Auto-Increment column feature, you had to create an Identity column with a default of 0, then, as a separate step, create a unique index for each Identity Column. If a default value clause was not added when the column was created, then you have to insert 0 for each identity column in the row.* and *New behavior: The SQL Relational Database Engine now creates an index for an Identity (auto-increment) column. It will also default the value for the column to the value 0. The net result is that the value will increment to the next in the series for the column.*

At the time the invention was made, it would have been obvious to a person of ordinary skill in the to add the feature of auto-increment files as taught by the Pervasive

software website to the system of Sierakowski in view of Braud so that the resultant system would comprise auto-increment fields. One would have been motivated to do so because auto-increment feature is well known in the field of database.

8. Claims 44, 45, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sierakowski in view of Braud and further in view of Deleeuw (U.S. Patent Application Publication Number 2003/0115551).

As per claim 44, Sierakowski in view of Braud teaches saving the DTS packages the user could re-execute the migration/conversion routine (Sierakowski, Page 12, i.e., *Figure: SQL Server Enterprise Manager*). It is inherent that files that have been migrated to SQL Server are logged in the DTA package. However, Sierakowski in view of Braud does not explicitly recite the limitation: "wherein said database migration tool adds a driver prefix to a file to identify that the file has already been migrated to the SQL database server".

Deleeuw teaches the limitation:

"wherein said database migration tool adds a driver prefix to a file to identify that the file has already been migrated to the SQL database server" (Paragraph 0030).

Deleeuw teaches marking up files that have been processed (Deleeuw, Paragraph 0030).

Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of marking up files that have been processed, as taught by Deleeuw, to the system of Sierakowski in view of Braud so that,

in the resultant system, migrated files would be marked up either by a flag or adding a file name of respective driver dll file. One would have been motivated to do so because it is a well known practice in the art to mark up files that have been processed.

As per claim 45, Deleeuw teaches the limitation:

"wherein said prefix is a name of the driver dll" (Deleeuw, Paragraph 0030).

Marking files that has been processed is well known in the art. For example, Deleeuw teaches marking up files that have been processed (Deleeuw, Paragraph 0030).

Claim 59 is rejected on the same basis claim 45.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

U.S. Patent Application Publication Number 2003/0195862 (Harrell)

U.S. Patent Application Publication Number 2002/0107871 (Wyzga)

10. Applicant's arguments with respect to claim 1-37, 40-62, and 81-96 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Myint whose telephone number is (571) 272-5629. The examiner can normally be reached on 8:30 AM - 5:30 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-5629.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis Myint

AU-2162

*Cam Truong*  
primary Examiner  
Cam Y Truong